

constant, TCI offers its subscribers, on average, roughly two more services than do otherwise identical unintegrated systems.<sup>6</sup>

#### A.5 Summary

In short, when TCI's current carriage patterns are reviewed, there is no evidence that the carriage of affiliated programming services by vertically integrated cable system operators has adversely affected the ability of non-affiliated services to compete. Thus, the historical record provides no support for the hypothesis that such "foreclosure" would occur in the future.

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<sup>6</sup> It should be noted that the results also suggest that other vertically integrated MSOs offer their subscribers more services than does TCI. This may be due to the fact that TCI, on average, operates smaller systems than the other major integrated MSOs.

**Table A-1**  
**TCI vs. Non-TCI Carriage Rates For Basic Cable Programming Services**  
**1995**

Programming Service <sup>1</sup>	TCI Ownership Interest	TCI Subscriber Penetration Rates (%)	Non-TCI Subscriber Penetration Rates (%)	Total Subscribers to Service	Difference in Penetration Rates	Difference in Penetration as a % of Total Cable Subscribers	Difference in Penetration as a % of Total Subscribers to Service
<b>TCI affiliated services</b>							
Prime Deportiva <sup>2</sup>	100.00	2.37	1.79	1,300,000	0.58	0.10	5.39
Home Shopping Network <sup>2,3</sup>	80.40	62.63	63.50	41,500,000	-0.87	-0.14	-0.22
International Channel	50.00	12.96	10.10	7,300,000	2.86	0.50	4.71
The Discovery Channel	49.29	90.15	99.27	67,300,000	-9.12	-1.59	-1.63
The Learning Channel	49.29	30.29	72.71	45,000,000	-42.42	-7.40	-11.33
Faith and Values Channel	49.00	55.48	33.11	25,500,000	22.37	3.90	10.55
QVC <sup>2,3</sup>	42.60	80.87	68.71	46,300,000	12.16	1.98	2.80
Court TV	33.33	41.57	34.64	24,700,000	6.93	1.21	3.38
CNN <sup>4</sup>	22.60	95.08	99.41	68,000,000	-4.33	-0.71	-0.72
CNN International <sup>2,4</sup>	22.60	3.28	4.91	3,200,000	-1.64	-0.27	-5.81
Headline News <sup>4</sup>	22.60	87.12	87.25	60,100,000	-0.13	-0.02	-0.02
The Cartoon Network <sup>4</sup>	22.60	13.66	40.24	24,700,000	-26.57	-4.39	-12.24
TNT <sup>4</sup>	22.60	94.50	97.09	66,600,000	-2.59	-0.43	-0.44
Turner Classic Movies <sup>2,4</sup>	22.60	0.20	7.26	4,200,000	-7.07	-1.17	-19.14
WTBS <sup>4,5</sup>	22.60	95.66	98.60	67,600,000	-2.94	-0.49	-0.49
BET Cable Network	21.96	58.50	65.52	44,300,000	-7.02	-1.22	-1.90
The Family Channel	20.28	87.64	95.23	64,700,000	-7.58	-1.32	-1.41
Fit TV	18.25	20.79	5.98	5,900,000	14.82	2.59	30.19
E! Entertainment Television, Inc.	10.40	28.98	58.93	37,000,000	-29.94	-5.22	-9.73
<i>Average (Weighted by Subscribers to Service)</i>		71.73	77.99	37,115,789	-6.27	-1.09	-2.03
<b>Non-TCI affiliated services</b>							
Arts & Entertainment (A&E)		88.41	93.83	64,000,000	-5.42	-0.95	-1.02
American Movie Classics (AMC)		94.32	84.32	59,300,000	10.00	1.74	2.03
America's Talking <sup>2</sup>		20.92	14.57	10,800,000	6.35	1.11	7.07
Bravo		20.86	35.15	22,500,000	-14.30	-2.49	-7.64
CNBC		86.34	82.32	57,200,000	4.02	0.70	0.85
Comedy Central		49.32	57.79	38,800,000	-8.47	-1.48	-2.62
Country Music Television (CMTV)		51.48	46.96	32,900,000	4.51	0.79	1.65
ESPN		94.88	99.68	68,100,000	-4.79	-0.84	-0.85
ESPN 2		24.30	47.43	29,900,000	-23.13	-4.04	-9.30
Fox Net <sup>2</sup>		4.23	2.31	1,822,466	1.92	0.33	12.64
FX <sup>2</sup>		82.84	20.64	21,700,000	62.20	10.85	34.46
Galavision <sup>2</sup>		8.90	2.16	2,300,000	6.74	1.18	35.23
GEMS <sup>2</sup>		5.81	1.80	1,719,749	4.02	0.70	28.08
History Channel <sup>2</sup>		0.76	1.60	1,000,000	-0.83	-0.15	-10.01
Home & Garden TV <sup>2</sup>		2.44	16.19	9,500,000	-13.75	-2.40	-17.40
Inspirational Network		3.92	15.35	9,200,000	-11.42	-1.99	-14.92
KTLA <sup>2</sup>		0.36	12.05	6,900,000	-11.69	-2.04	-20.37
Lifetime		92.79	93.09	64,100,000	-0.30	-0.05	-0.06
Mind Extension University		31.65	38.14	25,500,000	-6.49	-1.13	-3.06
MTV		91.81	91.71	63,200,000	0.10	0.02	0.02
MTV Latino <sup>2</sup>		0.91	0.93	635,982	-0.02	0.00	-0.37
Newstalk <sup>2</sup>		1.66	1.94	1,300,000	-0.28	-0.05	-2.57
Nickelodeon		93.50	95.57	65,600,000	-2.07	-0.36	-0.38
Nostalgia		11.70	13.17	8,900,000	-1.47	-0.26	-1.99
Sci-Fi		6.64	48.53	28,400,000	-41.89	-7.31	-17.73
Television Food Network		25.03	21.61	15,300,000	3.42	0.60	2.69
The Weather Channel		91.98	89.04	61,700,000	2.94	0.51	0.57
TNN		92.92	94.64	65,000,000	-1.72	-0.30	-0.32
Travel Channel		23.71	29.10	19,400,000	-5.39	-0.94	-3.34
USA		94.28	98.40	67,300,000	-4.12	-0.72	-0.74
VH 1		62.39	82.10	54,200,000	-19.71	-3.44	-4.37
WGN		56.06	58.83	40,200,000	-2.77	-0.48	-0.83
WOR		18.74	18.90	13,000,000	-0.16	-0.03	-0.15
<i>Average (Weighted by Subscribers to Service)</i>		71.12	73.90	31,253,885	-2.79	-0.49	-1.07

**Table A-1 (continued)**  
**TCI vs. Non-TCI Carriage Rates For Basic Cable Programming Services**  
**1995**

Correlation between ownership share and penetration rate difference:	0.1621
P-Value:	0.5073

Notes:

<sup>1</sup> Only national, basic cable programming services for which data are complete are included. C-Span, C-Span II, and Intro TV! are excluded.

<sup>2</sup> Total service subscribers come from the Time Warner White Paper, Exhibit 12.

<sup>3</sup> With the exception of ownership, data are from 1994. Home Shopping Network's ownership (from Kagan) is reported as voting securities by TCI.

<sup>4</sup> TCI subscriber data from Turner, ownership data from Kagan.

<sup>5</sup> TCI's records indicate indirect ownership is 100%.

Sources:

"Broadband Multichannel Universe Snapshot at Year-End", Cable TV Programming, Paul Kagan Associates, Inc., No. 215, March 29, 1996, p. 1.

Cable TV Programming, Paul Kagan Associates, Inc., No. 210, October 25, 1995.

Economics of Basic Cable Networks 1996, Paul Kagan Associates, Inc., p. 22.

Table A-2

## TCI's Carriage of Unaffiliated Services

Estimates of TCI Cable Subscribers "Foreclosed" to Unaffiliated Program Services						
Program Service	Total Subscribers to Program Service <sup>1</sup>	Foreclosed Subscribers <sup>2</sup>	Foreclosed Subscribers as a Percent of...			
			All TCI Subscribers	Total Subscriber Transactions for Unaffiliated Services	Total Subscribers to the Service	Subscriber Totals
CMTV	19,600,000	-2,702,567	-20.1%	-0.3%	-13.79%	All TCI Subscribers <sup>6</sup> 13,445,609
VH1	47,400,000	-1,653,810	-12.3%	-0.2%	-3.49%	
Sci-Fi	11,000,000	-1,626,919	-12.1%	-0.2%	-14.79%	National Subs <sup>1</sup> 58,030,380
Travel Channel	17,500,000	-1,600,027	-11.9%	-0.2%	-9.14%	
WGN	38,100,000	-1,479,017	-11.0%	-0.1%	-3.88%	
Nostalgia	14,700,000	-1,236,996	-9.2%	-0.1%	-8.41%	
Playboy <sup>3</sup>	8,000,000	-1,236,996	-9.2%	-0.1%	-15.46%	Total Subscriber Transactions for Unaffiliated Services <sup>7</sup> 1,053,554,062
TMC	10,700,000	-1,223,550	-9.1%	-0.1%	-11.44%	
WWOR	12,500,000	-994,975	-7.4%	-0.1%	-7.96%	
New Inspirational	7,000,000	-833,628	-6.2%	-0.1%	-11.91%	
Sports Channel America <sup>4</sup>	20,000,000	-806,737	-6.0%	-0.1%	-4.03%	
Trinity <sup>4</sup>	18,000,000	-793,291	-5.9%	-0.1%	-4.41%	
WPIX	9,700,000	-712,617	-5.3%	-0.1%	-7.35%	
Bravo	11,500,000	-403,368	-3.0%	0.0%	-3.51%	
KTLA	5,500,000	-389,923	-2.9%	0.0%	-7.09%	
WSBK	577,000	-322,695	-2.4%	0.0%	-55.93%	
International Channel	4,900,000	-255,467	-1.9%	0.0%	-5.21%	
MOR Music <sup>5</sup>	7,000,000	-161,347	-1.2%	0.0%	-2.30%	
Telemundo	13,320,000	-13,446	-0.1%	0.0%	-0.10%	
FamilyNet <sup>5</sup>	NA	-13,446	-0.1%	0.0%	NA	
TMS News	NA	-80,674	-0.6%	0.0%	NA	
<b>Totals <sup>8</sup></b>	<b>276,997,000</b>	<b>-18,541,495</b>				

**Table A-2 (continued)**  
**TCI's Carriage of Unaffiliated Services**

Estimates of TCI "Advantage" Provided to Unaffiliated Program Services						
Program Service	Total Subscribers to Program Service <sup>1</sup>	Advantaged Subscribers <sup>2</sup>	Advantaged Subscribers as a Percent of...			
			All TCI Subscribers	Total Subscriber Transactions for Unaffiliated Services	Total Subscribers to the Service	Subscriber Totals
VISN/ACTS	19,100,000	3,455,522	25.7%	0.3%	18.1%	All TCI Subscribers <sup>6</sup> 13,445,609
Mind Ext Univ	24,000,000	1,653,810	12.3%	0.2%	6.9%	
CNBC	49,000,000	1,411,789	10.5%	0.1%	2.9%	
TWC	53,400,000	1,317,670	9.8%	0.1%	2.5%	
C-SPAN2	31,300,000	873,965	6.5%	0.1%	2.8%	National Subs <sup>1</sup> 58,030,380
C-SPAN	59,400,000	833,628	6.2%	0.1%	1.4%	
Univision <sup>9</sup>	12,000,000	833,628	6.2%	0.1%	6.9%	
Lifetime	57,000,000	605,052	4.5%	0.1%	1.1%	Total Subscriber Transactions for Unaffiliated Services <sup>7</sup> 1,053,554,062
FoxNet	2,022,000	578,161	4.3%	0.1%	28.6%	
TNN	57,500,000	551,270	4.1%	0.1%	1.0%	
EWTN	32,000,000	457,151	3.4%	0.0%	1.4%	
Cinemax <sup>5</sup>	6,300,000	309,249	2.3%	0.0%	4.9%	
MTV	57,300,000	295,803	2.2%	0.0%	0.5%	
Showtime	10,700,000	282,358	2.1%	0.0%	2.6%	
ESPN <sup>5</sup>	61,700,000	228,575	1.7%	0.0%	0.4%	
Galavision	4,231,062	188,239	1.4%	0.0%	4.4%	
Nick	59,000,000	161,347	1.2%	0.0%	0.3%	
USA Network	60,124,000	147,902	1.1%	0.0%	0.2%	
A&E	56,000,000	134,456	1.0%	0.0%	0.2%	
Comedy Central	28,000,000	107,565	0.8%	0.0%	0.4%	
Natl. Jewish TV	3,000,000	107,565	0.8%	0.0%	3.6%	
KTVT	2,400,000	94,119	0.7%	0.0%	3.9%	
SPICE	6,600,000	26,891	0.2%	0.0%	0.4%	
HBO	17,400,000	13,446	0.1%	0.0%	0.1%	
Disney	7,080,000	13,446	0.1%	0.0%	0.2%	
<b>Totals <sup>8</sup></b>	<b>776,557,062</b>	<b>14,682,605</b>				

<sup>1</sup> From National Cable Television Association, Cable Television Developments (Nov 93), except where noted.

<sup>2</sup> Based on differential probabilities of carriage between TCI-owned and non-TCI, unintegrated systems, except where noted.

<sup>3</sup> Total Subscribers are represented by addressable homes, from Warren Publishing, Television & Cable Factbook (1994).

<sup>4</sup> Total Subscribers are from Warren Publishing, Television & Cable Factbook (1994).

<sup>5</sup> Carriage probabilities were unstable. The number of foreclosed subscribers was based on differentials in straight carriage rates.

<sup>6</sup> TCI.

<sup>7</sup> The sum of Total Subscribers over all unaffiliated program services.

<sup>8</sup> May not sum due to rounding.

<sup>9</sup> Total Subscribers are from Warren Publishing's electronic Factbook (1993).

**Table A-3**  
**TCI's Carriage of Affiliated Services**

Estimates of TCI Cable Subscribers "Foreclosed" to Affiliated Program Services					
Program Service	Total Subscribers to Program Service <sup>1</sup>	Foreclosed Subscribers <sup>2</sup>	Foreclosed Subscribers as a Percent of...		Subscriber Totals
			All TCI Subscribers	Total Subscribers to the Service	
HSN	21,000,000	-2,285,754	-17.00%	-10.9%	All TCI Subscribers <sup>3</sup> 13,445,609
The Learning Channel	20,400,000	-2,258,862	-16.80%	-11.1%	
QVC Fashion	7,600,000	-672,280	-5.00%	-8.8%	
E! Entertainment	22,000,000	-658,835	-4.90%	-3.0%	National Subs <sup>1</sup> 58,030,380
Cartoon Network	6,132,000	-605,052	-4.50%	-9.9%	
HSN 2	13,000,000	-363,031	-2.70%	-2.8%	

Estimates of TCI "Advantage" Provided to Affiliated Program Services					
Program Service	Total Subscribers to Program Service <sup>1</sup>	Advantaged Subscribers <sup>2</sup>	Advantaged Subscribers as a Percent of...		Subscriber Totals
			All TCI Subscribers	Total Subscribers to the Service	
Encore <sup>4</sup>	15,000,000	8,470,734	63.00%	56.5%	All TCI Subscribers <sup>3</sup> 13,445,609
Court TV	14,100,000	4,356,377	32.40%	30.9%	
AMC	44,500,000	2,971,480	22.10%	6.7%	
Prime Sports Network <sup>5</sup>	27,000,000	2,070,624	15.40%	7.7%	National Subs <sup>1</sup> 58,030,380
QVC	46,200,000	1,680,701	12.50%	3.6%	
The Box	16,000,000	900,856	6.70%	5.6%	
BET	36,800,000	793,291	5.90%	2.2%	
TNT	59,000,000	766,400	5.70%	1.3%	
Headline News	51,600,000	537,824	4.00%	1.0%	
Discovery Channel	59,300,000	470,596	3.50%	0.8%	
Family Channel	57,400,000	255,467	1.90%	0.4%	
WTBS	60,032,000	201,684	1.50%	0.3%	
CNN	61,100,000	53,782	0.40%	0.1%	

<sup>1</sup> From National Cable Television Association, Cable Television Developments (Nov 93), except where noted.

<sup>2</sup> Based on differential probabilities of carriage between TCI-owned and non-TCI, unintegrated systems, except where noted.

<sup>3</sup> TCI.

<sup>4</sup> Total Subscribers are represented by subscribers to which service is available, from Warren Publishing, Television & Cable Factbook (1994).

<sup>5</sup> Total Subscribers are from National Cable Television Association, Regional Sports Networks Media Guide (1993) for Prime Network under the Prime Network Affiliates tab.

Table A-4

## Summary of Carriage Rates and Results of Probit Model

Service	Carriage Rates (%)						Probit Model				
	Including Missing Value Records			Excluding Missing Value Records			TCI Coefficient	P Value	But-For Subscriber Difference	TCI Basic Subscribers (in Model)	Percent Difference
	TCI ≥ 50%	Non-TCI Non-Vert.	Difference (TCI - Non)	TCI ≥ 50%	Non-TCI Non-Vert.	Difference (TCI - Non)					
CMTV	14.2	34.0	-19.8	11.3	35.8	-24.5	-0.8645	0.0001	-1,853,772	9,219,745	-20.1%
HSN	10.6	17.2	-6.6	9.6	22.6	-13.0	-0.6906	0.0001	-1,563,099	9,219,745	-17.0%
LEARNING	6.5	12.5	-5.9	6.8	17.4	-10.7	-0.7903	0.0001	-1,549,745	9,219,745	-16.8%
PREVUE	4.3	7.6	-3.3	5.4	11.8	-6.4	-0.6797	0.0001	-1,207,546	9,219,745	-13.1%
VH1	27.5	30.3	-2.7	31.7	42.3	-10.6	-0.6014	0.0001	-1,131,646	9,219,745	-12.3%
SCIFI	0.8	6.0	-5.2	0.7	8.3	-7.7	-1.3661	0.0001	-1,116,906	9,219,745	-12.1%
TRAVEL	2.5	5.6	-3.1	3.2	8.2	-5.1	-0.7486	0.0001	-1,098,887	9,219,745	-11.9%
WGN	65.6	82.0	-16.4	60.7	79.7	-19.0	-0.4091	0.0001	-1,018,529	9,219,745	-11.0%
NOSTAL	2.9	5.1	-2.2	3.5	8.3	-4.9	-0.6175	0.0001	-847,992	9,219,745	-9.2%
PLAYBOY	0.4	2.4	-2.0	0.4	4.1	-3.7	-1.1634	0.0001	-845,683	9,219,745	-9.2%
TMC	22.9	25.6	-2.6	26.7	32.5	-5.8	-0.3505	0.0001	-835,639	9,219,745	-9.1%
WWOR	12.4	16.6	-4.2	14.1	20.3	-6.2	-0.3190	0.0001	-681,363	9,219,745	-7.4%
NEWINSP	2.0	5.3	-3.4	2.3	6.6	-4.4	-0.5819	0.0001	-569,585	9,219,745	-6.2%
SC_AM	1.3	2.4	-1.2	1.9	4.3	-2.4	-0.5897	0.0001	-552,806	9,219,745	-6.0%
TRINITY	6.9	9.7	-2.8	6.4	11.4	-5.0	-0.3566	0.0001	-540,549	9,219,745	-5.9%
WPIX	2.2	3.5	-1.2	3.1	5.2	-2.2	-0.4877	0.0003	-489,733	9,219,745	-5.3%
QVCFASH	0.3	3.0	-2.7	0.5	2.9	-2.4	-0.9245	0.0001	-463,365	9,219,745	-5.0%
E_ENT	4.7	4.1	0.6	5.3	6.4	-1.0	-0.2767	0.0104	-449,013	9,219,745	-4.9%
CARTOON	0.4	2.5	-2.1	0.7	3.5	-2.9	-0.8542	0.0001	-418,345	9,219,745	-4.5%
BRAVO	3.1	4.2	-1.1	4.0	5.6	-1.6	-0.2272	0.0803	-280,260	9,219,745	-3.0%
KTLA	1.3	1.9	-0.6	1.7	2.8	-1.1	-0.4019	0.0098	-269,728	9,219,745	-2.9%
HSN2	0.9	1.1	-0.2	0.5	2.0	-1.4	-0.5206	0.0222	-247,634	9,219,745	-2.7%
WSBK	1.8	3.5	-1.7	2.1	5.7	-3.6	-0.3383	0.0347	-217,278	9,219,745	-2.4%
INTLCHAN	0.3	0.3	0.0	0.4	0.5	-0.1	-0.5192	0.1579	-175,208	9,219,745	-1.9%
PLAYNITE	0.9	0.7	0.3	1.2	1.3	-0.1	-0.1651	0.3857	-93,560	9,219,745	-1.0%
TMSNEWS	0.1	0.3	-0.2	0.1	0.4	-0.3	-0.5594	0.2168	-56,989	9,219,745	-0.6%
TELEMUND	0.6	0.3	0.3	0.5	0.4	0.1	-0.1125	0.7189	-13,648	9,219,745	-0.1%
HBO	96.1	87.8	8.3	97.1	92.0	5.1	0.1549	0.2335	5,319	9,219,745	0.1%
DISNEY	87.3	70.6	16.8	89.3	78.1	11.2	0.0646	0.4588	11,981	9,219,745	0.1%
SPICE	0.3	0.2	0.1	0.3	0.3	0.0	0.0827	0.8536	19,659	9,219,745	0.2%
CNN	98.4	92.8	5.6	98.5	95.4	3.1	0.3487	0.0212	36,307	9,219,745	0.4%

Table A-4 (continued)

## Summary of Carriage Rates and Results of Probit Model

Service	Carriage Rates (%)						Probit Model				
	Including Missing Value Records			Excluding Missing Value Records			TCI Coefficient	P Value	But-For Subscriber Difference	TCI Basic Subscribers (in Model)	Percent Difference
	TCI ≥ 50%	Non-TCI Non-Vert.	Difference (TCI - Non)	TCI ≥ 50%	Non-TCI Non-Vert.	Difference (TCI - Non)					
KTVT	4.2	2.4	1.8	3.7	2.3	1.4	0.1444	0.2466	59,996	9,219,745	0.7%
NATJEWTV	0.2	0.1	0.1	0.3	0.1	0.1	0.3619	0.4383	71,907	9,219,745	0.8%
COMEDY	19.7	13.7	6.0	24.3	19.9	4.4	0.0324	0.6453	77,735	9,219,745	0.8%
AE	64.9	47.0	18.0	72.0	59.5	12.6	0.1243	0.0774	89,873	9,219,745	1.0%
USA	96.9	84.4	12.6	97.2	89.9	7.3	0.4523	0.0001	105,398	9,219,745	1.1%
NICKDN	84.8	62.6	22.2	87.9	75.3	12.7	0.2760	0.0006	109,262	9,219,745	1.2%
GALA	4.7	2.0	2.7	4.6	2.7	1.9	0.1403	0.2816	126,631	9,219,745	1.4%
WTBS	97.9	97.6	0.3	97.4	97.4	0.0	0.2034	0.1329	142,410	9,219,745	1.5%
FAMILYCH	93.1	90.0	3.1	95.4	91.1	4.3	0.2633	0.0090	176,928	9,219,745	1.9%
SHOW	68.8	55.2	13.7	76.9	62.0	14.9	0.2362	0.0007	195,672	9,219,745	2.1%
MTV	80.0	47.8	32.2	86.6	64.6	22.0	0.5648	0.0001	206,236	9,219,745	2.2%
EWTN	12.6	5.9	6.7	14.6	9.2	5.4	0.1529	0.0641	313,843	9,219,745	3.4%
DISCOV	93.7	76.7	17.0	96.2	81.6	14.6	0.6915	0.0001	319,728	9,219,745	3.5%
HEADLINE	66.7	41.3	25.4	72.6	54.8	17.8	0.3113	0.0001	365,965	9,219,745	4.0%
NASHV	96.6	91.4	5.2	97.5	92.8	4.6	0.4713	0.0002	375,107	9,219,745	4.1%
FOXNET	18.1	4.3	13.8	13.3	3.0	10.2	0.7381	0.0001	392,771	9,219,745	4.3%
LIFETIME	82.3	43.1	39.3	86.6	57.1	29.5	0.7781	0.0001	414,309	9,219,745	4.5%
EPRGD	4.8	1.5	3.2	5.8	2.6	3.2	0.3574	0.0036	434,270	9,219,745	4.7%
TNT	94.0	65.4	28.6	96.2	70.5	25.6	1.1612	0.0001	529,505	9,219,745	5.7%
BET	22.2	10.4	11.8	26.8	15.5	11.3	0.2839	0.0001	540,996	9,219,745	5.9%
UNIVIS	13.7	5.9	7.8	15.1	7.1	8.0	0.2647	0.0016	571,274	9,219,745	6.2%
CSPAN	71.3	33.6	37.7	76.0	45.5	30.5	0.7376	0.0001	573,822	9,219,745	6.2%
CSPAN2	13.3	5.4	7.9	16.3	8.7	7.7	0.3055	0.0004	603,620	9,219,745	6.5%
THE_BOX	1.1	0.1	1.0	1.7	0.2	1.5	1.2699	0.0051	619,001	9,219,745	6.7%
DMEXP	4.8	0.9	4.0	6.2	1.6	4.6	0.5028	0.0001	684,387	9,219,745	7.4%
WEATH	75.0	37.9	37.1	79.7	49.5	30.2	0.7312	0.0001	907,349	9,219,745	9.8%
JONESGAL	3.9	0.0	3.9	5.6	0.1	5.5	1.5722	0.0001	924,715	9,219,745	10.0%
CNBC	61.4	19.9	41.6	68.7	29.8	38.9	1.0308	0.0001	971,600	9,219,745	10.5%
MINDEXTU	14.8	2.8	12.0	16.3	4.1	12.3	0.7412	0.0001	1,136,083	9,219,745	12.3%
QVC	69.2	37.1	32.1	76.0	45.9	30.1	0.7240	0.0001	1,151,274	9,219,745	12.5%
PRIMESPT	22.3	1.7	20.7	21.9	2.4	19.5	1.0923	0.0001	1,423,597	9,219,745	15.4%



Table A-4 (continued)

## Summary of Carriage Rates and Results of Probit Model

Service	Carriage Rates (%)						Probit Model				
	Including Missing Value Records			Excluding Missing Value Records			TCI Coefficient	P Value	But-For Subscriber Difference	TCI Basic Subscribers (in Model)	Percent Difference
	TCI >= 50%	Non-TCI Non-Vert.	Difference (TCI - Non)	TCI >= 50%	Non-TCI Non-Vert.	Difference (TCI - Non)					
AMC	83.0	26.2	56.9	86.9	35.4	51.5	1.4933	0.0001	2,033,766	9,219,745	22.1%
VISNACTS	32.7	5.4	27.3	35.7	7.7	28.0	0.9791	0.0001	2,366,095	9,219,745	25.7%
COURT	34.8	1.1	33.6	34.8	2.0	32.8	1.8102	0.0001	2,982,971	9,219,745	32.4%
ENCORE	81.7	6.7	75.0	84.1	9.2	74.9	2.3352	0.0001	5,812,236	9,219,745	63.0%
EPRGDJR	0.1	0.4	-0.3		0.7	-0.7			— Unstable Results	—	
ESPN	99.8	96.7	3.1	100.0	98.3	1.7			— Unstable Results	—	
FAMNET		0.1	-0.1		0.1	-0.1			— Unstable Results	—	
MAX	64.7	51.6	13.1	66.8	64.5	2.3			— Unstable Results	—	
MORMUSIC		1.2	-1.2		1.2	-1.2			— Unstable Results	—	
NASA	0.1	0.2	-0.1		0.3	-0.3			— Unstable Results	—	
UPIDATA		0.1	-0.1		0.2	-0.2			— Unstable Results	—	
XPRXCH	2.0	0.0	1.9	3.1		3.1			— Unstable Results	—	

## **APPENDIX B**

## DESCRIPTION OF THE BENEFITS AND EFFICIENCIES OF CLUSTERING

- **Improved Maintenance And Customer Service.** Clustering enables a cable operator to centralize its customer service and maintenance functions to reduce the number of call centers and better position truck fleets to offer quicker and superior service. In addition, a cable operator's operating support and network management systems can be implemented more cost effectively. This, combined with the use of consistent components and architecture, allows for more sophisticated support systems that will aid in preventing outages and restoring service more quickly in the event of an outage.
- **Improved System Architecture Improvements.** Clustering enables cable operators to better design the architecture of their physical plant. For example, combining physically adjacent cable systems may make it possible to eliminate headends. A central headend can be utilized that connects to the outlying hubs by a fiber ring. This permits improved signal quality since off-air signals can be picked up at or near the broadcast source and satellite receivers can be located to avoid terrestrial interference and signal diminution. The use of a central headend also results in lower capital costs and cost savings associated with reductions in maintenance and materials, the offering of similar channel line-ups, and the use of common technical standards.
- **Interconnectivity And Ubiquitous Communications And Programming.** By establishing a regional network, cable operators can provide increased interconnectivity so that local origination, government, and educational channels can be aired to one, several, or all communities in the cluster. Institutional networks could obtain the same benefit because they would interconnect with a much larger base. This is particularly important to educators who wish to use interconnections for distance learning.
- **Clustering Promotes Regional Programming.** Regional programming services, such as news and sports, are often difficult for any single cable operator to develop if its systems cover only a fraction of a given metropolitan area. Efforts to develop and operate such programs with other cable operators can be cumbersome and inefficient. A cable operator's ability to spread the costs of programming over a greater number of

subscribers within a region increases the prospects of success and, therefore, the likelihood that the operator will incur the cost of developing local and regional programming.

- **Improved Sales Of Local And Regional Advertising.** Cable operators typically do not attract a share of local and regional advertising that is proportionate to the viewing of cable services. This is because any single cable system generally does not reach a sufficiently large audience to make cable advertising expenditures attractive. In order to reach an entire metropolitan area (or television ADI), for instance, advertisers may need to contact, and negotiate terms with, as many as 8-10 different cable operators. These hurdles are both time-consuming and expensive for local and regional advertisers.<sup>131</sup> Clustering substantially reduces these difficulties and therefore results in greater use of cable advertising by local and regional merchants and increased revenue for the cable operator. Cable becomes an important new competitor to serve the advertisers and, in the process, the customers.
- **Lower cost of promoting cable systems to potential subscribers.** Currently, it is difficult and expensive for cable operators to advertise their own services using radio, broadcast television, and local newspapers because a substantial portion of the audiences reached by such media are not served by the operator. Clustering increases the number of potential subscribers an operator can reach with each advertising dollar. In addition, clustering makes it easier to engage in more attractive joint consumer promotions with area retailers and others (e.g., McDonald's, local sports teams) because a cable operator's service area will more closely approximate the customer base of the other party.

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<sup>131</sup> Cable systems have attempted to deal with this problem by forming advertising cooperatives. However, such cooperatives are difficult to organize, frequently take years to develop, and often operate inefficiently (i.e., they typically require unanimous consent for key decisions, such as increased capital investments or commitments of advertising). The cooperative approach also involves substantial practical limitations, such as differing channel line-ups, which render cooperatives a poor alternative for advertisers.

- Compatibility Of Set Top Boxes. Clustering will promote the compatibility of set top boxes, which could result in several types of efficiencies, including reduced headend costs (systems can use one type of satellite receiver, transcoder, and modulator, as well as authorization computers that could serve an entire market), reduced inventories, consistent service offerings (such as interactive guides and VCR, television and remote control interfaces), and easier interoperability with consumer electronic equipment.